



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. James Houston
Environmental Compliance Manager
New Castle County Department of Special Services
187-A Old Churchmans Road
New Castle, DE 19720

JUN 05 2003

Re: Pretreatment Program
NPDES No. DE0050547

Dear Mr. Houston:

On June 27, 2002, I conducted an audit of the New Castle County pretreatment program. A copy of the report of the audit is enclosed for your use. I apologize for the delay in providing the report. The report indicates that several adjustments to the County's pretreatment program will be necessary in order for it to completely satisfy the requirements of the General Pretreatment Regulations.

I realize that since the time of the audit, the only two significant industries covered by the County's approved program have left the system. However, since the County still runs a significant portion of the City of Wilmington pretreatment program, many of the required and recommended actions will still be applicable to these pretreatment activities. In writing the report, I also tried to write the requirements and recommendations that are based on specific findings at an industrial user in a general way instead of applying only to that user since the users are no longer covered by the program. If there are no users in the County's part of the City's program to which these items will apply, then no action on the part of the County will be necessary. However, I wanted to include them in the report to ensure that the County is aware of how EPA expects users to be addressed in similar situations.

Previously, I have discussed with the County the possibility of dropping the formal requirement for implementation of an approved pretreatment program for the service area of the County's treatment plant. It is my understanding that the County wishes to continue the requirement to maintain an approved pretreatment program in its NPDES permit. If you decide that this is no longer the case, I will need a letter requesting that the program requirements be dropped. The letter should include a listing of any industrial customers connected to the treatment plant, an assessment of whether they meet the criteria of being a significant industrial user, and a brief description of any industrial users discharging process wastes. In addition, the letter should describe how the listing was compiled, and what measures the County has taken to ensure that the listing is complete.

Customer Service Hotline: 1-800-438-2474

The findings, requirements, and recommendations are included in Section X of the enclosed report and are discussed in more detail below.

Legal Authority - As we have previously discussed, the County's pretreatment ordinance includes a mechanism for granting variances for pretreatment standards and requirements. However, the variance language does not meet EPA requirements for such language and therefore must be revised. My letter of June 17, 2002 included a review of the County's pretreatment ordinance which described the changes to the variance language that are necessary, as well as several other changes to the ordinance that will be needed before it is in complete compliance with the General Pretreatment Requirements. A copy of the legal review is included in attachment 1 of the report. Since this legal authority is also an integral part of the Wilmington pretreatment program, these changes will be necessary even if the County's program requirements are dropped.

In addition, a review of our file indicates that we do not have copies of pretreatment ordinances for Odessa and Townsend, although these two municipalities send wastewater to the County's treatment plant. To complete the legal authority of the County's program, I will need copies of these two pretreatment ordinances. If the ordinances have not been adopted, but there are only non-domestic users (or users that would not be regulated by the ordinance) located in the two municipalities, I would only need a letter indicating what type(s) of users are served within the municipalities, and specifically stating that no users regulated by the ordinance are connected to the system. If the County's program requirements are dropped, this requirement would be dropped as well.

Application of Standards - On June 7, 2002, I sent the County a letter which accepted the reevaluation of its local limits. The County's NPDES permit requires that the County adopt the new limits within 4 months of acceptance by EPA. To date, I have not received notification that the limits have been adopted. Please provide an update on the adoption of the new limits. Note that with the flow from Middletown no longer going to the County's treatment plant, significant changes which could impact the local limits have probably occurred, and it may be appropriate to begin a new reevaluation of the limits.

Both the Johnson Controls permit (lead, copper, and nickel) and the MacDermid permit (cyanide and zinc) include limits that are less stringent than the local limits in the County's ordinance. While the County may have granted variances to these users for these limits, I found no documentation in the files that this had been done. The County must apply the more stringent of the categorical standards or local limits. If the County grants a variance to a local limit, it must document the granting of the variance, including the justification for the variance, the reason why the specific numerical limits were selected, and the total loading of that pollutant allocated to all industrial users relative to the maximum allowable industrial loading determined during the development of the most recently approved local limits.

MacDermid is subject to the Organic Chemicals, Plastics and Synthetic Fibers (OCPSF) categorical standard, and the permit included the OCPSF standards as concentrations. However,

the OCPSF regulation requires that the permit issuing authority apply the limits as mass-based standards in the permit. The County must amend the permits of any OCPSF facilities to include mass-based limits. Note that the flow used to develop the mass-based limits is the actual long-term average facility flow, and not the facility design flow or maximum flow. The average long-term flow is used to determine both the daily maximum and monthly average categorical standards.

Johnson Controls is subject to the battery manufacturing standards, which are production-based standards. The County appears to have converted the production-based standards to mass standards, which is authorized under the General Pretreatment Regulations. However, based on the information in the County's file, I could not duplicate the development of the mass standards. Based on the information in the County's file and the visit to the facility during the audit, it is my understanding that the facility discharges wastewater regulated under the battery wash and other miscellaneous wastestreams subparts of the guideline. Using a production rate of 193,781 lbs of lead/day found in the County's file, I calculated a monthly average mass limit for lead of 0.047 lbs/d and a daily maximum limit of 0.099 lbs/d. For copper, I calculated a monthly average limit of 0.234 lbs/d and a daily maximum limit of 0.444 lbs/d. These limits are significantly more stringent than the limits in the Johnson Controls permit. Therefore, I have included a requirement that the limits for users subject to production-based standards be reevaluated. Since Johnson Controls is no longer under the County's program, it is unclear whether there are any users left that are subject to production-based standards.

Compliance Monitoring - It is my understanding that for the County's sampling of OCPSF pollutants for MacDermid, the County collects the sample, but then gives the sample to the user for analysis. The County sampling is required to be independent of the user. If the County's lab is unable to do the OCPSF analysis, it may use a contract lab, including the same contract lab used by the user. However, in order for the sample results to be considered to have been collected independent of the user, the user can never have control of the sample, nor have control of the lab analyzing the sample.

For users subject to mass-based standards, the County must determine the flow during the collection period of the sample. In documenting the samples, the County must then use this flow to convert the concentration results received from the lab to mass results, and record the mass results in the file for the compliance evaluation. I did not see evidence that the mass results had been determined for the County's results, or that the flow had been recorded during the sampling period. In addition, I did not see evidence in the file that the County was documenting the name of the person collecting the samples, the specific sampling location, and the analytical methods used. If this data is maintained somewhere other than the users' files, please provide a sample and a description of where the information is kept.

Based on the review of the Johnson Controls file, it appears that this user is collecting monthly pH samples, and that the sample that it collected on September 18, 2001 was in violation (see file review worksheets in attachment 3). However, there was no documentation in the file that the user notified the County of the violation within 24 hours of becoming aware of the violation, nor did the user submit the results of a pH resample within 30 days of becoming

aware of the violations. Note that since the analysis of pH is required immediately upon sample collection, I assumed that they became aware of the violation on the day it occurred. While the user took another pH sample in October, it did not report the results of the resample until the end of January. Since this is more than 30 days after the due date of the resampling report, it appears that the user should have been considered to be in SNC during calendar year 2001 for a late report.

While it appears that Johnson Controls is collecting monthly pH samples, its permit requires that pH be recorded continuously. While monthly pH monitoring in lieu of continuous monitoring is acceptable to satisfy the requirements of the General Pretreatment Regulations, the County must ensure that users monitor in accordance with their permits. In the event that a change is authorized, the permit must be amended or reissued to reflect the change.

For its sample results of March 28, 2001, and reported to the County on July 11, 2001, MacDermid reported several pollutants as non-detectable, but at a detection level that was above the concentration limits in the OCPSF standards (see file review worksheet page 9). If the County had determined mass limits and the flow on this sampling day was low enough that the masses at the detection level were below the allowable masses, this would be acceptable. However, the County must ensure that all monitoring is conducted such that a determination can be made as to whether the user was in compliance. If the detection levels are above the applicable permit limits, a compliance determination cannot be made, and the County must ensure that the user repeats the sampling to demonstrate compliance. If this becomes a consistent problem, we do have guidance available to help resolve some of these issues.

As noted above, Johnson Controls is subject to production-based categorical standards. As part of its obligation with users subject to production-based standards, the County is required to verify that the production reported by the user is consistent with actual production. While the County would not be expected to watch the production operations and count the number of batteries produced at Johnson, it should review the user's production records during the inspection and document its findings in the inspections report. At the time of the audit, the latest inspection report in the Johnson file included "N/A" in response to the production question on the form.

In addition, although the inspection reports appear to note whether the users have spill/slug control plans, I did not find documentation of whether the plans were sufficient based on a site-specific evaluation, or whether they had been fully and effectively implemented. While the reports did comment on the user's overall housekeeping practices, which is an indicator of spill/slug potential, the evaluation of the implementation of the spill/slug control plan needs to be more specific. The inspection reports should document the County's evaluation of the implementation of the spill/slug plans.

For Johnson Controls, the file indicated that the user had developed a spill control plan, but I did not find an actual copy of the plan in the file. The County must ensure that its files are complete, including copies of any spill/slug control plans that have been required and/or submitted. For MacDermid, the file included a copy of the spill plan, but the plan did not satisfy

all of the requirements for a slug control plan under the General Pretreatment Regulations because it did not include a description of the user's discharge practices, a description of stored chemicals, or procedures to notify the County in the event of a slug. While it is unclear whether the plan in the file was required as a slug control plan under the General Pretreatment Regulations, this sort of information should be included in any slug/spill control plan. For your use, I have included a sample slug control plan checklist in attachment 6 of the report. The County should review the spill/slug control plans that have been submitted and ensure that they are complete.

Finally, it was unclear whether the people signing the user self-monitoring reports are authorized signatories under the General Pretreatment Regulations. For Johnson Controls, the reports were signed by Rick Thompson, the Plant Manager. However, the Plant Manager is only authorized to sign reports under certain conditions. I did not see any indication in the file that these conditions were applicable in this situation, nor did I see a written authorization for the Plant Manager to sign reports from an authorized representative of the user. For MacDermid, the reports were signed by Richard Mayes, the Technical Manager. This position is not listed as an authorized representative in the General Pretreatment Regulations, and I also did not find a written authorization from an authorized representative in this file either. The County must therefore review the signatory authorities and ensure that reports are signed by the appropriate people.

Enforcement - The County's user permits generally incorporate the local limits by reference to the pretreatment ordinance. However, it appears that when evaluating compliance, the County only evaluates compliance with limits that are specifically listed in the permits. First, the County should list all of the local limits in the permit, even if it does not require self-monitoring for a number of them. This will help ensure that everyone is aware of the requirement to comply with these limits. Second, even where the limits are not specifically listed in the permit, the County must evaluate compliance with the applicable limits whenever sample results for those pollutants are received. For both users, it appears that violations in monitoring results were not identified by the County, and no enforcement responses were initiated. The County must ensure that all violations, including violations of the local limit for BOD, are identified, and enforcement in accordance with the approved enforcement response plan (ERP) occurs. The file review worksheets in attachment 3 of the report indicate the violations that I found, the enforcement actions documented in the file, and the enforcement action required by the ERP.

Because it appears that not all of the violations had been identified in the past, and that some of the unidentified violations constituted significant noncompliance (SNC), I have included a requirement that the County reevaluate SNC for calendar years 2001 and 2002, and publish any SNC that had not been previously published. For this reason, I also included a requirement that the County develop a mechanism for better identifying violations, including violations of the resampling report requirements. Since there are a fairly significant number of significant users which the County is required to track under the Wilmington pretreatment program, I have recommended that the County invest in software to help identify and track violations.

Please provide a response to the required actions described above and in Section X of the

audit report. Where a required action cannot be completed immediately, please provide an estimate of when it will be completed. In addition, if there are required actions which you do not believe are necessary because of the elimination of the flow from Middletown in the system, please let me know. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,


John Lovell
Pretreatment Coordinator

Enclosure

cc: Peder Hansen, DE DNREC (w/enclosure)